

5



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,987	09/22/2003	Tarang Luthra	99990-053001	1756
20985	7590	05/18/2006	EXAMINER	
FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			HAROON, ADEEL	
			ART UNIT	PAPER NUMBER
			2618	

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/668,987	LUTHRA, TARANG
	Examiner Adeel Haroon	Art Unit 2618

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: ____.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5, 6, 9-11, 13, 14, and 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Beaudin et al. (U.S. 6,853,694).

With respect to claim 1, Beaudin et al. disclose a method of receiving a plurality of signal inputs from a plurality of antenna elements (Column 2, lines 54-57). Beaudin et al. teach determining a signal strength of the plurality of signal inputs (Column 2, lines 57-60). Beaudin et al. also disclose determining a combination of the plurality of signal inputs to combine in a combined signal, the combination having a number of signal inputs that is less than all of the plurality of signal inputs based on a selection of reduced power consumption (Column 2, line 60 – Column 3, line 4).

With respect to claim 2, Beaudin et al. further disclose outputting the combined signal to a user device (Column 6, lines 44-49).

With respect to claim 3, Beaudin et al. further disclose a wireless network (Column 6, lines 44-49).

With respect to claim 5, Beaudin et al.'s method will result in a combined signal strength greater than any of the signal strengths of the plurality of inputs (Column 2, line 60 – Column 3, line 4).

With respect to claim 6, Beaudin et al. further disclose performing a digital signal process (Column 3, lines 4-6).

With respect to claim 9, Beaudin et al. disclose an article comprising a machine-readable medium including machine-executable instructions for receiving a plurality of signal inputs from a plurality of antenna elements (Column 2, lines 54-57). Beaudin et al. teach determining a signal strength of the plurality of signal inputs (Column 2, lines 57-60). Beaudin et al. also disclose determining a combination of the plurality of signal inputs to combine in a combined signal, the combination having a number of signal inputs that is less than all of the plurality of signal inputs based on a selection of reduced power consumption (Column 2, line 60 – Column 3, line 4).

With respect to claim 10, Beaudin et al. further disclose outputting the combined signal to a user device (Column 6, lines 44-49).

With respect to claim 11, Beaudin et al. further disclose a wireless network (Column 6, lines 44-49).

With respect to claim 13, Beaudin et al.'s method will result in combined signal strength greater than any of the signal strengths of the plurality of inputs (Column 2, line 60 – Column 3, line 4).

With respect to claim 14, Beaudin et al. further disclose performing a digital signal process (Column 3, lines 4-6).

With respect to claim 17, Beaudin et al. disclose a system receiving a plurality of signal inputs and storage medium for storing executable instructions and data (Column 2, lines 54-57). Beaudin et al. teach a processor determining a signal strength of the plurality of signal inputs (Column 2, lines 57-60). Beaudin et al. also disclose determining a combination of the plurality of signal inputs to combine in a combined signal, the combination having a number of signal inputs that is less than all of the plurality of signal inputs based on a selection of reduced power consumption (Column 2, line 60 – Column 3, line 4).

With respect to claim 18, Beaudin et al. further disclose a plurality of antenna elements (Column 2, lines 54-57).

With respect to claim 19, Beaudin et al. further disclose outputting the combined signal to a user device (Column 6, lines 44-49).

With respect to claim 20, Beaudin et al.'s method will result in combined signal strength greater than any of the signal strengths of the plurality of inputs (Column 2, line 60 – Column 3, line 4).

With respect to claim 21, Beaudin et al. further disclose performing a digital signal process (Column 3, lines 4-6).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 7, 8, 12, 15, 16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaudin et al. (U.S. 6,853,694).

With respect to claim 4, the method of Beaudin et al. is described above in the discussion of claims 1-3. Beaudin et al. teaches using the method for data signals (Column 1, lines 6-7), but does not expressly disclose a computer. However, the examiner takes Official Notice that a computer processing data signals is well known in the art. Therefore, it would be obvious to one of ordinary skill in the art to include a computer as the user device in Beaudin et al.'s method in order to provide a computing device to handle the data signals.

With respect to claims 7 and 8, the method of Beaudin et al. is described above in the discussion of claim 1. Beaudin et al. further teach the capability of handling more than three inputs (Column 3, lines 56-63), but do not expressly disclose five signal inputs and the combined signal comprising three inputs. However, it would be obvious to one of ordinary skill in the art to use five signal inputs and correspondingly a

combined signal comprising three inputs in order to be compatible with certain system requirements.

With respect to claim 12, the method of Beaudin et al. is described above in the discussion of claims 9-11. Beaudin et al. teaches using the method for data signals (Column 1, lines 6-7), but does not expressly disclose a computer. However, the examiner takes Official Notice that a computer processing data signals is well known in the art. Therefore, it would be obvious to one of ordinary skill in the art to include a computer as the user device in Beaudin et al.'s method in order to provide a computing device to handle the data signals.

With respect to claims 15 and 16, the method of Beaudin et al. is described above in the discussion of claim 1. Beaudin et al. further teach the capability of handling more than three inputs (Column 3, lines 56-63), but do not expressly disclose five signal inputs and the combined signal comprising three inputs. However, it would be obvious to one of ordinary skill in the art to use five signal inputs and correspondingly a combined signal comprising three inputs in order to be compatible with certain system requirements.

With respect to claim 22, the method of Beaudin et al. is described above in the discussion of claim 9. Beaudin et al. further teach the capability of handling more than three inputs (Column 3, lines 56-63), but do not expressly disclose five signal inputs and the combined signal comprising three inputs. However, it would be obvious to one of ordinary skill in the art to use five signal inputs and correspondingly a combined signal comprising three inputs in order to be compatible with certain system requirements.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ogino et al. (U.S. 2002/0016156) disclose a diversity selective combining technique.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adeel Haroon whose telephone number is (571) 272-7405. The examiner can normally be reached on Monday thru Friday, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AH  
5/9/06

*Nguyen Vo*  
5-14-2006

**NGUYEN T. VO**  
**PRIMARY EXAMINER**